

Notice of Allowability

Application No.

09/672,237

Examiner

Joseph P. Hirl

Applicant(s)

CAID ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to January 16, 2007.
2. ☒ The allowed claim(s) is/are 1-35.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

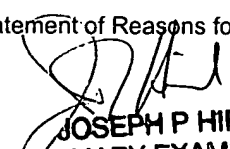
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 1/16/7
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JOSEPH P. HIRL
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

Reasons for Allowance

1. Claims 1-35 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art taken alone or in combination fails to teach the claims invention of context vector generation and storage for the purpose of retrieval of documents wherein context vectors represent conceptual relationships among information by quantitative means, relationship among context vectors are deterministic and summary vectors of records are clustered to reduce searching time facilitating retrieval of records using a query interface. Claim 1 also limits to orthogonal context vectors, proximal co-occurrences and similar vector orientation. Claim 18 also limits to an RxR mutual co-occurrence matrix with Singular Value Decomposition. Claim 21 also limits to association of context vectors with information items having similar items in vector space having summary context vectors and searching by query using a summary context vector created from the query. Claim 23 also limits to proximal co-occurrences with context vectors related to predetermined encoded meanings and similar orientation. Claim 27 also limits orthogonal context vectors to information items in a dictionary of information items. Claim 33 also limits to orthogonal context vectors of neighboring information items that proximally co-occur with target information. Claims 34 context vectors to automatically index documents using a defined index of terms.

The closest prior art (Kimoto, Construction of a Dynamic Thesaurus and Its Use for Associated Information Retrieval, Nippon Telegraph and Telephone Company) teaches an information retrieval system based on a dynamic thesaurus using a

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connectionist approach consisting of nodes which represent each term in the thesaurus and links or connections between nodes. Node weights and links reflect a user's particular interest. Five kinds of relations are identified between the nodes to include a co-occurrence relation that is obtained from keyword relations in term information. In many ways Kimoto's teachings are different from that of the applicant such as Kimoto does not teach context vectors for use in storage and retrieval of information items where the n dimensional context vectors are generally orthogonal to each other and similarity is determined by proximal co-occurrences in vector space.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence Information

3. Any inquiry concerning this information or related to the subject disclosure should be directed to the Primary Examiner, Joseph P. Hirl, whose telephone number is (571) 272-3685. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David R. Vincent can be reached at (571) 272-3080.

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Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,

Washington, D. C. 20231;

Hand delivered to:

Receptionist,

Customer Service Window,

Randolph Building,

401 Dulany Street,


Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 273-8300 (for formal communications intended for entry.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).


Joseph P. Hirl
Primary Examiner
March 14, 2007